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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/705,493

11/10/2003

Eric Hamilton

112056-0120

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24267

7590

04/20/2006

CESARI AND MCKENNA, LLP
88 BLACK FALCON AVENUE
BOSTON, MA 02210

EXAMINER

PARDO, THUY N

ART UNIT

PAPER NUMBER

2165

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/705,493

Applicant(s)

HAMILTON ET AL.

Examiner

Thuy Pardo

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/02/04; 6/27/05; 7/14/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 1-20 and 27-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. For instance, the content of these claims is limited to an abstract idea, a compilation of data per se, and it does not constitute a statutory process, machine, manufacture or composition of matter in which the statutory process must result in a physical transformation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an

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international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Koseki et al. (Hereinafter "Koseki") US Patent No. 6,732,124.

As to claim 15, Koseki teaches the invention substantially as claimed, comprising:
a write allocation process of a file system [log writing unit for repairing a file system when its consistency is lost, see the abstract] , the write allocation process adapted to associated received file data with a buffer data control structure upon receipt of a write operation directed to the file while the file is undergoing write allocation [col. 7, lines 45 to col. 8, lines 36; s2-s9 of fig. 15; acknowledgement, col. 26, lines 6-24].

As to claim 1, Koseki teaches the invention substantially as claimed, comprising:
receiving a write operation comprising data to be written to the file [log buffer control table, and log write buffer, 148-150 of fig. 20];
associating the received data with a buffer data control structure associated with the file [col. 26, lines 57 to col. 27, lines 8]; and
marking the buffer data control structure associated with the file as being dirty for a next consistency point [S18-S22 of fig. 17; col. 20, lines 21 to col. 21, lines 11].

As to claims 12, all limitations of this claim have been addressed in the analysis above, and this claim is rejected on that basis.

As to claim 21, Koseki teaches the invention substantially as claimed, comprising:
determining if the buffer is dirty for the current consistency point [S13 of fig. 17; col. 20, lines 12 to col. 21, lines 2];
performing, in response to determining that the buffer is dirty for the current consistency point, write allocation of a buffer associated with the file for a current consistency point [col. 21, lines 3-11]; and
freeing, if the buffer is dirty for the next consistency point, data written during the step of write allocation [S18-S22 of fig. 17; col. 20, lines 21 to col. 21, lines 11].

As to claim 27, Koseki teaches the invention substantially as claimed, comprising:
a flags array having entries for flags associated with a current consistency point and entries associated with a next consistency point [col. 20, lines 21 to col. 21, lines 11];
a first data pointer pointing to a file data associated with the current consistency point [current log write pointer, col. 40, lines 43-55; col. 42, lines 59-63]; and
a second data pointer pointing to file data associated with the next consistency point [col. 42, lines 59-63; col. 43, lines 1-5].

As to claim 6, Koseki teaches the invention substantially as claimed. Koseki further teaches that entries associated with a current consistency point are accessed by indexing into the

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flags array using a value calculated by performing a logical AND operation on a consistency point counter and a value of 1 [col. 37, lines 30-47].

As to claim 7, Koseki teaches the invention substantially as claimed. Koseki further teaches that the consistency point counter is monotonically increasing value that identifies a current consistency point [.

As to claim 8, Koseki teaches the invention substantially as claimed. Koseki further teaches subtracting from a value of 1 a result of performing a logical AND operation on a consistency point counter and a value of 1 [col. 37, lines 30-47].

As to claim 10, Koseki teaches the invention substantially as claimed. Koseki further teaches that entries associated with the current consistency point and the next consistency point are differentiated by performing modulo two addition to a consistency point counter [col. 40, lines 44-62; col. 42, lines 55 to col. 43, lines 23].

As to claim 14, Koseki teaches the invention substantially as claimed. Koseki further teaches that the second pointer in the buffer data control structure points to data already written to the file [col. 42, lines 43 to col. 43, lines 26].

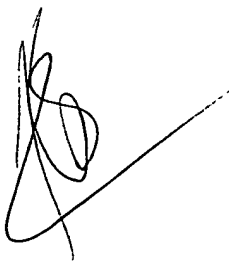
As to claims 2-5, 9, 11, 16-20, 22-26, 28 and 29, all limitations of these claims have been addressed in the analysis above, and these claims are rejected on that basis.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy Pardo whose telephone number is 571-272-4082. The examiner can normally be reached on Mon-Thur.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 14, 2006

A handwritten signature in black ink, appearing to be 'Thuy N. Pardo', written over a horizontal line.

**THUY N. PARDO
PRIMARY EXAMINER**